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THE

NEW IDEA

Of

ASTRONOMY

And the

The Sight of the Eye.

By

PROF. D. WOODWELL HUNT,

Of Massachusetts.

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This little work is affectionately Dedicated

By the Author

To his Friend

MRS. WM. T. SAXON,

Late of Newark, New Jersey.

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NEW IDEA OF ASTRONOMY

AND

THE LIGHT OF THE EYE.

The bigot will not allow or admit that there can be any great error in the common, accepted views of Astronomy of the solar system as received from the ancients.

Astronomy that we call half-civilized. I will only refer to a few of the many philosophers on Astronomy to show the confidence they had in the observations of the ancients. But Galileo had a great mind, with great zeal to think. To contemplate the cause to the effect he arrived at some new ideas of the material world and its motion. For his courage he was persecuted and

charged with heresy, and put into prison because he said the world is round and rolls around. Since the days of Galileo, Newton, the two Herschels, and many other men of noble mind. But there are thousands that cannot think or conceive an idea only from others.

The old school of Astronomy and Theology have kept hand in hand, holding conventions to keep light out of the way if it did not come in the line of their peculiar ideas.

About the whole world of mankind doubt the truth of the statement that the Sun is a body of material fire, in the form of a globe, about 885,000 miles diameter. The Astronomers teach us that the nearest planet to the so-called Sun is Mercury, and is distant from the so-called Sun 37,000,000 miles.

Venus is distant 68,000,000 miles.
Earth is distant 95,000,000 miles.
Mars is distant 142,000,000 miles.
Vesta is distant 215,000,000 miles.
Juno is distant 230,000,000 miles.
Ceres is distant 260,000,000 miles.
Pallas is distant 299,000,000 miles.
Jupiter is distant 485,000,000 miles.
Saturn is distant 885,000,000 miles.
Uranus is distant 1,800,000,000 miles.

From the above tables of calculations, by the most eminent Astronomers, it would be plain to the common mind that reflects on those great bodies, that there could not be a man of sound mind so blind to the light of wisdom as to think that the all-wise Creator of the universe would form the Earth only 8,000 miles diameter, and the so-called Sun about 885,000 miles diameter, being 390,000 times larger than the

Earth, and set the Earth distant from the so-called Sun 95,000,000 miles.

It is said the so-called Sun is a material body, and it sends its heat, motion, and light out from itself through all space, in every direction from its central point to the circumference of the solar system.

If this be true, there must be a perfect uniform flow of heat, motion and light gone forth to all parts of the solar system, giving all space and all planets in space, heat, motion and light, equal in all places in proportion to the direct ray upon the surface of the earth or planets, and all material bodies in space.

It must be plain to the mind of the intelligent man that reflects on the construction of the solar system, as taught by the old schools at this day, that

there is as great an error now, in the theory of the solar system, as there was in the time of Galileo, and many of the old philosophers and astronomers, when man thought the earth was a plane, and the Sun, so-called, revolved over and under the earth, as it now appears to many of mankind on this earth.

The old theory was as consistent as the present incongruous system of astronomy, that is taught by professors of the schools to-day. The reader that contemplates the planets or stars, and their spheres, and the great velocity of the solar system, and that there is a vacant space around the central point of the solar system about 74,000,000 miles diameter, in which no planet has been found. The nearest planet is Mercury, 37,000,000 miles

distant from the so-called Sun in the central point.

It is said by learned men of science that the *Sun* is about 885,000 miles diameter, not any too large to do service in the spacious arena of the 74,000,000 miles diameter being the supposed space around the so-called Sun. There is not a planet or other material body for the *Sun's* heat, motion and light to rest on. The Sun is supposed, by the best authority, to be sending its heat, motion and light into every part of the solar system, with that uniformity that governs all the material bodies, giving a uniform heat, motion and light to all parts of the solar system, in proportion to their angel to the face of the earth.

It is plain to the mind of many men that if there was a Sun as described,

only 885,000 miles diameter, it would be a mere pigmy to give heat, motion and light to a solar system of the diameter of 74,000,000 miles around the central point of the solar system.

But when man becomes acquainted with the solar system of the universe, all will be delighted with the sublime grandeur of its structure and magnificence.

The New Idea of Astronomy.

Elements and science of Astronomy that should be taught by philosophers of the day, the earth's connection with the solar system, and the cause of their action in their proper order, as seen in the eye and intellect of man, by the aid of natural or artificial light.

To understand the above, we should first seek to know the law that governs all the natural, and also to know what the natural is.

The natural cannot govern itself.

Heat cannot govern itself.

Motion cannot govern itself.

Light cannot govern itself.

Rain cannot govern itself.

To obtain a knowledge of the above,

we should examine the natural, and learn of the law of influx and force, how it flows into the body and mind of man, to help man to understand the external and internal, the material and immortal. If a man is only natural, he is like the natural animal, and is not responsible to a higher law, but it is not so with all. Man has a mind, or soul; he wishes to know why and what he is; he is a mysterious animal, and as he begins to expand, the inquiry should be to learn of self and the surroundings; he should say in himself, how do I

HEAR, SEE, TASTE, SMELL AND FEEL?

It is thought by a great part of man that they understand the five senses by which we hear, see, taste, smell and feel; but there are but few that do understand those organs of the body,

truly. Most men think that they hear, see, taste, smell and feel at a distance, but the animal man cannot hear at a distance. He cannot see at a distance. He cannot taste at a distance. He cannot smell at a distance. He cannot feel at a distance.

It is an apparent truth that we perceive things at a distance, but it is not so. It is in those organs of the body (the five senses) that we perceive or understand any of the natural or material bodies of the solar system, and their influence on the mind or soul of man that are on the earth.

The material bodies that revolve around in the solar system, that are of sufficient density to be reflected into the eye by the aid of solar or artificial light, and through the lens of the eye into the mind of man. Thus the im-

age of ourselves is reflected into a mirror, and from the mirror in through the lens of the eye into life, in the body of man.

An object that is capable of being reflected is seen in the eye of the material body, and in no other way can it be seen. Thus we may perceive and understand that all we see is from the material bodies that surround us—is reflected into the eye of the material body. We cannot hear, see, taste, smell or feel outside of those organs of the material body. But by the aid of artificial means we can concentrate a greater number of rays of light into the eye, and thus, by the greater number of rays of light, we perceive the lines of an object, clearer and more defined in the eye, as it is with a spy-glass or telescope. The solar light of

day passes into the instrument at the large orifice, and is conducted through the dark chamber in the instrument, and throuh the various lens, converging the rays of light into the small eye-glass, and through that into the eye, and through the lens of the eye into the intellect or mind of man into life. Thus the eye receives an image of the object on the lens of the eye, and reflects it into life in the body of man.

The sight of the eye has the appearance of a truth, but its only an apparent truth that we see as it appears outside of the eye, or hear outside of the ear, or smell outside of the nose, or taste outside of the tongue, or feel outside of the body, but it is in those organs that we perceive and understand ourselves and the surroundings. The captain of a ship takes his

sextant in his right hand and holds it firm, he puts his eye to the small telescope that receives the image of the object that is reflected from the index-glass on to the horizon, and from the horizon-glass into the eye.

The Sun, so-called, or solar light, has the appearance of a truth, but it is only an apparent truth. The earth has the appearance of being a plane, but it is not a plane ; it is a globe, and its great proportions are such that we do not perceive that the seas and lakes of water all have a convex form of eight inches to the mile.

The center of the solar system, so-called the Sun, is not so. It is not a material body 885,000 miles diameter, and the nearest planet is Mercury, distant from the central point 37,000,000 miles, forming a globe at the central of

the solar system, 74,000,000 miles diameter. It is plain to the minds of man, that to send heat, motion and light from the center to the circumference of the solar system in open rays, and in every direction from the center, would be a great waste of material heat, motion and light.

Now, if we will consider the sphere of the solar system, its diameter being 690,000,000 miles, and the adhesive electrical straight lines in all this vast space there is not any heat, motion or light emitted from the adhesive electrical straight lines, only where there is a material body having an atmosphere. The electrical spark cannot ignite anything any more than a man can make himself from nothing.

The adhesive accumulation of electrical pulse is by action on the adhe-

sive lines from the central toward the circumference of the solar system. The latent power of all material bodies is in proportion to the combustible qualities of the material.

If the Sun, so-called, was at the center of the solar system a material body, it could not continue if it was the source of heat, motion, and light, for they are the result of combustion, and combustion cannot continue if it has no supply from material outside of itself, because solar heat is material. By and in the adhesive electrical straight lines flows from the circumference a supply, and the electrical pulse flows from the central toward the circumference.

Thus the supply and demand is continual; one cannot act without the other; it always acts in proportion to

the qualities of the surrounding atmosphere. The atmosphere is about the same density on the surface of the earth, and its density decreases as it ascends from the earth. But it is not known whether the decrease is uniform from the earth to the outside of the atmosphere.

The spherical sphere of the solar system is as a globe, a vast sphere, with the adhesive lines flowing from the circumference to the central. The electrical pulse flows from the central toward the circumference, on the adhesive lines forming the sphere of this vast machinery and power revolving all the bodies that are in the folds of the solar system.

Each one of the planets being different in size and different in density from every other body, no two planets or

material bodies are alike. Hence, they all find their orbit.

All material bodies are governed by the same great law of force. Thus it is plain that the planets or bodies will continue in their orbit, and cannot vary from their path only by the great law of force. We know more about this earth that we live on than we do of all the other planets that we have around in the solar system. They are held in space by the adhesive lines, and are acted on by the electrical pulse entering the atmosphere as it comes in contact with the adhesive electrical lines, and are broken by the earth's atmosphere, and the electrical spark ignites the atmosphere into a twilight, and it continues to increase in light until noonday, then it decreases until the evening twilight. Thus it is continually be-

coming sunrise on one part of the earth, and sunset on the other side of the earth. The electrical spark is always igniting the atmosphere on the side of the earth that is toward the central point of the solar system. Thus we have heat, motion, and light on this earth.

The atmosphere of the Earth, at the extreme from the Earth, which is supposed to be from 50 to 80 miles in depth, and is so thin at the extreme point from the Earth that there is not sufficient combustion when it comes into the electrical pulse. It emits the smallest perceptive particle of light, but the light increases as it approaches the Earth, according to the quality of the atmosphere. Thus it may be seen why one day has more heat, motion, and light than other days, or why

that, on the eastern slope of the continent of America, the heat is thirty-three degrees lower by the thermometer than it is on the western slope, on an average, or why it varies on the eastern slope from 10 degrees below zero to 110 degrees above zero. No philosopher can show the cause of this by the theory of the old school.

The atmosphere of the earth cannot be reflected into the eyes only when it is on fire.

The material bodies that are reflected into the eye by the solar electrical or an artificial light, are received into the eye as they are in their natural condition, not luminous. But all luminous bodies are seen in the eye with great refraction, as it is with the flame of a gas-burner; when seen at a distance of a quarter of a mile from the

burner, it will be seen in the eye and in the intellect many hundred times larger than the flame is at the burner; the gas would not burn without the aid of the surrounding atmosphere.

Thus it is with all luminous bodies, such as comets, meteors, shooting or blazing or falling stars.

The comets come and go, and we do not know much of them but to see them. History informs us of comets so bright as to be visible at noonday. Many of them are of celebrity, reflecting a pale, sickly, disagreeable light, much more disagreeable and disastrous than the pale, sickly moonlight or starlight of the night. A comet was seen at Rome, at noonday, shortly before the assassination of Julius Cæsar. Halley's comet, in 1305, is described as a terrific comet, being of such magnitude that

the tail was so long as to reach around the world 5,000 times. The comet of 1680 covered an area of 9700, and its length was 45,000,000 miles, and many others much larger.

Those philosophers had a very vivid, fertile mind. They say some of the smaller ones are only 25 miles diameter, and the nucleus cannot be seen by the largest telescopes, even when nearest the earth, and only as a small speck of fog. That man could not perceive that he had fog in his eye; that if he would get it out of his eye he would understand that all the light he has is seen in his eye, and that the object seen in the eye is three thousand times smaller in the eye than it is in the understanding of the man.

If we look into the eye of a man we will see the image of ourself in his eye,

about the size of a small kernel of grain. Thus we may perceive that all the adhesive, electrical lines are from the central, and that the electrical spark of light is less than one thousandth part of an inch in diameter, and it ignites the atmosphere on the side of the earth that is faced toward the center of the solar system. As the world rolls around, the adhesive lines are broken, and the electric spark ignites the atmosphere into twilight, and it continues to increase in light until noonday, then it decreases until evening twilight. Thus it is continually becoming morning to one portion of the inhabitants of the earth, and evening to another portion at the same time.

But we must understand that all we see is in the eye, and not outside of the eye.

The eye has no power to go outside of the eye, but, by a wise construction of the great creation, man has power to see the image of objects on the earth that are reflected into the eye of man.

The electrical power radiating from the central to the circumference on the adhesive lines in every direction, from the central to the circumference, forming a globe in which all bodies of the system revolve around the great central, and all being governed by the great law of force and harmony. In the whole space outside of the atmosphere of all the planets and bodies that are controlled by the influence of the adhesive and electrical lines, there is no emission of light from the adhesive electrical lines in all the vast, unoccupied space, and natural darkness is

continually there until a material body comes into the space with an atmosphere about it.

A telegraph line, thousands of miles in length, overland, in air and water, will not emit or show a spark of light until the electrical fluid comes to a break in the line of the telegraph.

When the Earth comes between the Moon and the central point of the adhesive lines, there will be an eclipse of the Moon or any other material body. When the Moon or any other material body comes between the Earth and in line with the central point of the solar system, then we say there is an eclipse of the Sun ; but it is not so ; it is the disturbing of as many of the adhesive electrical lines as is contained in the diameter of the Moon or any material body that is passing. The electrical

fluid ceases to flow for the time, until that body has passed, and the adhesive lines become united, and the work goes on as before. I have noticed that whenever a meridian solar eclipse occurs the air begins to become colder, and the thermometer to go down thirty hundred in forty-five minutes, and after the body had passed, the mercury would go up in two hours. It is plain that if the Sun, so-called, is a material body at the center of the solar system, and is giving off heat, motion and light, and it flows in every direction, from the center to the most remote planet, and with evenness and uniformity that governs all in order. It would be impossible that such a change could take place in so short a time.

If the solar heat, motion, and light comes from the atmosphere of the Earth

and not any where else, it is in the adhesive lines that flows the material from the circumference toward the central, and it becomes electrical, and flows from the central toward the circumference.

We should remember that the adhesive and electrical lines are not reflective, but adhesive and electrical lines, and their force is felt by all the universe of this solar system.

Planets receive all their heat, motion, and light from the adhesive and electrical lines.

All planets communicate with other planets through adhesive and electrical straight lines, and thus the whole solar system is part and parcel with the great Supreme Creator.

It is plain to the intelligent mind of man that the great and vast network

of the adhesive, electrical lines so wisely constructed of material and immaterial, and He has arranged them in such order, and balanced them so very nicely that not one of them will ever come within eleven million miles of every other planet. He has given each and every planet an attractive and repelling power to keep them in motion, and all in harmony with the motion of the great matter of action.

If the solar system is of such great proportions, and sends its material heat, motion, and light from its centre in every direction from the centre, what must be the waste of heat, motion, and light in all the great, unoccupied space of the solar system.

It is plain that not one five thousandth part of the space of the solar system is occupied by any material

bodies. Can it be that the pretender of philosophy can be honest in his teachings at this day? Is he not led and influenced by the old school, and, in the same train of discipline, he draws all his ideas from the teaching of the times, when it did not do to express an opinion that was not in accordance with theology and the accepted science Astronomy of the day.

I hope the reader will not think that I am too fast or too severe on the philosopher or the astronomer. I want truth and knowledge if it can be had. I must lay aside all that tends to predispose or prejudge, and be willing to have the new thought. Try to understand the new, and leave the old.

The stars, since the commencement, have been a study with man. What has he learned that he can tell you?

in truth, nothing; no, not a thing; nothing but folly and stuff. The philosopher will tell you to go with him to the hall of science; he will hand you one of the many of their big-leaved books; he will show you that the fixed stars are all grouped in constellations, from the most remote antiquity, and many of them are mentioned in the most ancient writings, and many of them bear the same names that the ancients gave them. The names of the constellations are sometimes found on a supposed resemblance of the objects to which the name belongs; such as Swan, Scorpion, Taurus, Hercules, Great Bear, Balance, Archer, Goat, Water Beaver, Fishes, Eagle, Dolphin, Little Bear, Dragon, Lyre, Whale and Crow. Also a host that might be added.

These representations were parts of the faculty of the Pagan myth or mythology. The earliest catalogue of the fixed stars was made by Hipparchus of the Alexandrian school, a man much above his race of humanity controlled by one man. Other catalogues have appeared from the Herschells, and Mayers, and a host of other catalogues in parts were made, the four by Hipparchus about 440 years before the Christian era.

Much of those old fables is retained in the school books of to-day, and the philosopher acknowledges that he can not ascertain the actual distance of any of the fixed stars, but he is very positive that the nearest one is more than twenty billions of miles distant from this earth. What man can comprehend one billion of miles, if he has a good

sound brain, but if a man can can span in his mind, and see with his eye, more than twenty billions of miles, I think his brain must be a little soft or weak.

The philosophers of the last century have muddled things very much.

They say the brightest fixed stars to the number of twenty are considered of the first magnitude.

The next seventy-five brightest fixed stars are of the second magnitude.

The next three hundred are of the third magnitude, and so on the number increases to sixteen magnitudes.

Now the man thinks he sees the fixed stars twenty to thirty billion miles from him. Many have written much about the eye, the organ of vision.

Sir David Brewster, in his treatise on optics, calls the eye, "That masterpiece of divine mechanism." He says,

in praise of God, "It is a wonder working artificer that constructed this organ, and we are sorry that our powers permit us to say so little and speak so feebly." The reason Sir David speaks so feebly is because he was looking through the wrong end of the glass, and not into the mind and soul of man. "The human eye," says Sir David, "is a spherical form, with a slight projection in front." He goes on with his remarks describing the eye.

In considering vision as achieved by means of an image formed at the the bottom of the eye, he says we can never reflect without wonder upon the smallness yet the correctness of the picture, the subtlety of the touch, the fineness of the lines. A landscape of three square leagues is brought into a space of half an inch in diameter, yet

the multitude of objects which it contains are all preserved, are all discriminated in their magnitudes.

It is a wonder that the man of today, having knowledge of natural science, cannot see the grand man, manifest in the union of the eye, the ear, the mind being the connecting link of man to the grand man.

If we saw outside of the eye, we would not see correctly. The sight of the eye, the ear, and the feeling must be connected with the mind, the understanding, the soul. They live together, they act together, and, when the body dies, they go from the body together. A just judge presides in court over all complaints that come into his court. He hears in the ear all the evidence; in the eye of the body the images of the plaintiff and

defendant are reflected into the mind, and he judges of the case as he has seen it in his mind and understanding.

Thus, if the sight of the eye were permitted to go outside of the eye, it would soon become useless.

The same with the Earth. If it should revolve in the same space in the solar system many days, the atmosphere of the Earth would be spent. The Earth would be in darkness, and death would follow, because of the absence of heat, motion and light. If, in the vast space that is unoccupied by material bodies that have atmospheres, there should be any wind or current of air outside of each and every planet of the solar system, it would cause a derangement of the order of all the planets, and all would go into confusion.

But this cannot be. The atmos-

phere of every planet or material body is in density and depth according to its quality to sustain an atmosphere.

The solar spots that appear on the disk of the so-called Sun are to be seen with the naked eye. But we are not so void of reason as to think that the sight of our eyes goes out ninety-five million miles, or that the light comes from the planet all the way to us by open conveyance, into our eyes. No, it is not so; it cannot be so; it has no foundation in reason or common sense.

The officer of a ship at sea takes an observation of the Sun by the aid of a quadrant or sextant, which he holds firm, with the telescope parallel with the Earth and his eye to the eye-glass, With his left hand he moves the index glass until the image of the Sun is car-

ried down to the water not more than three miles from the ship. By the aid of the instrument he gets the angle of the ray.

The Alexandrian family were many. When Alexander came to power the empire of Egypt was rich. All he had to do was to rob and murder. He built that great city, and it continued to flourish.

The Ptolemies collected a library, which, at the end, numbered 70,000 volumes. It was the wonder of the world a long time. But the great city fell under the Saracen, Yok, A. D. 640. Under the new rule the public library was doomed to be burned, to heat the public bathers. Those books no doubt contained the history of the Old World for 4,000 years. But that city became vile and depraved, their

canals all became destroyed, and a flood of sand came down from the great desert of Africa, covering Lower Egypt about twenty feet with sand.

Question No. 1: If the Sun, so-called, is sending its heat out from itself to every part of the solar system, how can it be other than uniform in proportion to its angle to the earth?

Question No. 2: If the Sun, so-called, is sending its motion out to every part of the solar system, how can there be other than a uniform motion in all parts of the system in proportion to its angle to the earth?

Question No. 3: Why is it dark in the night? If the Sun, so-called, is sending its light from itself to every part of the solar system, how can it be darker than it is in the shade of a mountain?

Description of the City of Alexandria.

Alexander the Great built a celebrated city in Lower Egypt. It was on the neck of land that separates Lake Mareotis from the Mediterranean sea, and not far from the Conopic mouth of the Nile. The great founder gave it the name Alexandria, A. M. 3578, and employed skillful engineers to assist in the plans and construction of the city. The site was selected by King Alexander the Great. The plot of the ground was twenty-seven miles in circumference. Its walls were high and strong, with one hundred and forty-seven watchtowers, with every convenience for the accom-

mo'ation of the officers and subordinates.

The walls and watchtowers were all constructed of brick and cement. The inside of the wall was ornamented with figures of every variety of animal, life size, landscape scenes, battles, armies, and all the great events and scenes of novelty. After the work was finished, the whole was covered with a luster as of glass.

The city was divided into wards, one to each watchtower. Each ward had two watchmen and their assistants, to keep the city in peace, and clean the streets. The two watchmen were ranked first captain and second captain. The whole watch was divided into fifteen districts, ten wards in each. Each district had one judge, who heard all complaints. The fifteen judges

constituted a board, that held court as often as needed. This board held the power of power of life or death, but subject to the approval of the king's council. If an officer of rank or a subordinate was found guilty of crime in office, he was punished with great severity, even with death or banishment.

The palace grounds occupied one-eighth of the city. They contained the royal residence, the museum, sepulchers, and many monuments of honor. The royal residence was superb, beautiful, inside and out. It was built after copies of the Doric and Corinthian, being blended together in harmony, giving the whole a beautiful appearance. The whole was ornamented with gold and precious stones and much carved work. The grounds

were ornamented with the choicest plants and flowers, the walks laid in marble of various colors, and everything rich, beautiful and pleasant, seen by the eye. Many beautiful, shady bowers, covered with foliage, and many birds making music. The museum building was an oval, one hundred and seventy-seven feet in width, three hundred and fifty-seven feet in length, and five stories high. The basement and first story were occupied as the arsenal. The second, third and fourth stories were occupied by the museum, each story sixteen feet high. Above the roof was a tower, near the front end, thirty-seven feet at the base, and at the top twenty-seven feet. The height from the base was fifty-seven feet, and one hundred and forty-seven feet from the ground to the highest

point. This edifice was of the Tuscan order, with cornice and the full order. The doors, windows and stairways were beautiful. The tower was beautiful inside and out, with every convenience for observation of the planets and stars, and all other bodies that can be reflected to the eye.

The city and streets were arranged beautifully, and the center street was four hundred feet in width, with sixty-seven streets each side of the center street, one hundred feet in width each. In the center, between these streets, was a small street, twenty-five feet in width, for ingress and egress and sewers' waste. It had two hundred and eighty-seven cross streets, seventy-seven feet in width, and four miles in length; with sewers connecting with the lake on the south side, and emptying into the Mediterranean sea.

The city had a circular park, nine hundred feet in diameter, with meandering paths in all directions. Around the outside of the park was a fence of brass. It was always kept clean and bright. Outside was a walk, thirty-seven feet in width, laid with black marble. In the center of this walk was a line of almond trees, set seventeen feet apart, with circular seats around each tree. The whole grounds were beautified with flowers. In the center was a canopy, one hundred and twenty-seven feet in diameter, covered with green flowering vines, and arranged with seats for the music. In the center were seven flag poles for displaying the flags and banners of the many conquered cities that had been added to the kingdom.

The two sides of the center street

were built after the Corinthian order, five stories high. The buildings were not alike on any two streets, and of different orders. Many of the best were of white marble, all finished inside very elaborately. Many of the buildings were of stone and mason work. Many of the palaces would cost more than a million dollars. The first story was for business purposes. All was very beautiful. The whole of the streets of the city were macadamized with flint stone and flint cement, all very smooth and beautiful. All the streets were set with shade trees of the choicest varieties, and vines, bushes and shrubbery of beauty and luxury.

The school edifice was curiously constructed. It was at the base like a star with five points. The fifth point was due south. It was five stories

high. The fifth point projected south sufficiently to form an angle of forty-five degrees with the base; and perpendicular on the north side one hundred and eighty-nine feet, forming a base at the top of the edifice forty-seven feet in diameter. The base of the observatory was thirty-seven feet in diameter, and at the top twenty-seven feet, with a hight of sixty-seven feet, and a pivoted turret on the top, projecting five feet all around, forming a cornice of the Grecian order. The interior of the edifice was finished after the full order of the Corinthian style. Every student had his separate apartment, and no two of them were allowed to remain together at night. There were only two classes—noble and ignoble, king and subordinate. The school was attended by only the

noble families and nobility. The ignoble were never admitted into any school, but all the subordinate were compelled to practice some useful employment or go into the army. In the school was taught the science of astronomy, for the purpose of obtaining a knowledge of astrology and divination. On the outside of the school edifice were balconies at every story, eight feet in width, leading to the south angular wall. Through that wall were openings to pass from one side to the other to observe the line of the solar light from day to day, and to observe the Moon in her phases; also the motion of the stars in conjunction in line with the Earth, and their effect on the various nervous or morbid conditions of animal life on the Earth.

To promote science, the learned as-

tronomer Hipparchus, of the Alexandrian school, was permitted to build four hemispheres over the sepulchers, each of them being seven hundred feet in diameter; two on the equator, one at the north, and one at the south, and three hundred and fifty-seven feet in the zenith, the inside resembling the color of the sky. The stars and planets were arranged in perfect order, moving with regularity in their proper courses, showing all that could be seen in one hemisphere, being reflected into the eye and intellect. The four hemispheres were arranged with transparent coverings, making it pleasant to the eye.

Thus the student was made familiar with the heavenly bodies, and by constant watching and noting the changes of the many stars of the constellations of the hemispheres.

These four rooms were all connected by doors. In the four hemispheres the solar light and lunar light were seen moving in order, according to solar and lunar time, with all the changes and variations. The comets were seen to come and go, and they knew but little of them. Stars shoot from their places and appear to go out. Many such phenomena are related in history.

Each ward had a library building to contain their part of the books, parchments and scrolls. Many of the books contained the history of astronomy, astrology, divinations, jugglery, the Chaldeans, and the victories and captures of cities; also theocracy, theology and traditions; also many contained the rules and styles of architecture of all the known world.

The high and haughty ignored the

ideas of those who refused to acknowledge the myths and mythology of the age.

The city became rich and built up on all sides. Its population, inside of the walls, was five hundred and fifty thousand. Outside of the city was a population, subject to the king, of fourteen hundred thousand—men, women and children. This great city was prosperous and flourishing, and second only to Rome.

The climate of Alexandria is very mild, and although being in latitude thirty-two degrees north, there is seldom any rain or frost. The country was watered by hundreds of canals, taking water from the river Nile, near Upper Egypt.

The cares of civil and religious government were in the hands of the

priests and military officers. The king was the great dictator, and those who did not regard his opinion were in danger. The priests were very numerous. They held one-sixth of the land as property. They were not required to perform religious services. They held the public records. It was their province to levy the taxes and appoint the collectors. They chose the judges and magistrates. On entering upon the office of judge or magistrate, each one was obliged to take an oath that even the commands of their sovereign should not sway them in the exercise of their duty. The tribunals were open and free to all ranks of people without expense of any kind. No professional pleadings were employed for pleading of causes. The judiciary were supported by the government.

The penal laws were severe on calumniators. Perjurers and the citizen so base as to disclose the secrets of the government to its enemies were punished by death. Emasculation was the penalty for him who violated the chastity of a free woman. The adulterer was burned to death. But two-thirds of the whole population were slaves. A man was allowed but one wife, but as many concubines as he could take care of. A man was obliged to acknowledge as legitimate all the children born to him by his wife or concubines.

Alexander was twenty years of age when he came to the throne of Macedonia, at the death of his father. This young prince possessed ability, and gave proofs, from youth, that marked the conqueror of the Eastern World.

The youth was under the tutelage of the philosopher Aristotle.

The young prince took great interest in astronomy, astrology, and the so-called science of philosophy. That made two-thirds of mankind slaves to one-third. The slaves were kept in ignorance as much as possible.

If any one became obnoxious, he was requested to become the bearer of a message; and on his arrival, he was put in custody with others. Next morning the order was given to put to death all the prisoners in cell No. 19. They were called, and, with only a blanket on them, they were conducted through a number of splendid apartments to a room about twelve feet square, furnished in splendor. They were ordered to be seated, the conductor closed the door, and immediately

the room began to descend, like an elevator, down into water, and all were drowned.

Alexander now became master of the Persian empire. He was so elated with success he gave way without restraint to every species of debauchery and intemperance.

But Alexander was roused to the situation when he saw it was impossible to retain the territory he had overrun, as his troops, foreseeing no end to their labors, positively refused to proceed. His pride was mortified, and he was obliged to return. After conquering all the Eastern World, it is said that he wept. On his arrival at Lusa, he was received with the honors due to a sovereign of the empire. He married the daughter of Darius. The king was now well in power; but he

feared the bold Chaldean's prophecy, and, in spite of reason, it depressed his spirits to such a degree that he gave himself up to riot and debauchery. In this state he committed many cruel murders. The consequence was an inflammatory fever, which, after a few days, put an end to his life in the thirty-third year of his age.

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